DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

Planning Division
Environmental Analysis Branch

20 June 2003

NOTICE OF AVAILABILITY
Draft Environmental Impact Statement
Raritan Bay and Sandy Hook Bay
Hurricane and Storm Damage Reduction Study
Union Beach, New Jersey

Dear Interested Party:

This is to inform you of the completion of the Draft Environmental Impact Statement (DEIS) for the above referenced proposed Federal action. The DEIS is being filed with the U.S. Environmental Protection Agency pursuant to the National Environmental Policy Act (NEPA) of 1969 and the President's Council on Environmental Quality (CFR Parts 1500-1508). An executive summary of the document, including its findings, is attached. Single copies of the DEIS can be obtained by contacting:

Mr. Howard J. Ruben
Environmental Analyst
CENAN-PL-ES
26 Federal Plaza
New York, New York 10278-0090
212-264-0206
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In addition, copies of the DEIS are available for your review at the Union Beach Memorial Library and the Monmouth County Public Library. Written comments to the DEIS are due forty-five (45) days from the date the Notice of Availability appears in the Federal Register, which is expected to be on or about June 30, 2003. Comments can be forwarded to Mr. Ruben, at the address mentioned above.

Sincerely,

L Houston

Len Houston
Chief, Environmental Analysis Branch

Enclosures

SYLLABUS

This report presents the results of a feasibility phase study to identify an implementable solution and determine the extent of Federal participation in a combined hurricane and storm damage reduction project for Union Beach, New Jersey. This Feasibility Study is prepared based on the recommendations of a Reconnaissance Study completed in 1993, which identified a possible solution to the flooding problems facing the community, determined that such a solution was in the Federal interest and identified the non-Federal sponsor. The Feasibility Study was cost shared between the Federal Government and the New Jersey Department of Environmental Protection (NJDEP), and was conducted under the provision of the Feasibility Cost Sharing Agreement executed in April 1997. The Feasibility Study was initiated in June 1997 upon receipt of initial study funds.

Union Beach is a residential community that occupies a 1.8 square mile area of land along the coast of the Raritan Bay. The area has been subject to major tidal inundation during storms, causing damage to structures throughout the low-lying community. Most of the flooding has been the result of storm surges from Raritan Bay with backwater flow into Chingarora, Flat and East Creeks, which intercept the project area.

During the Feasibility Study, various alternative plans of improvement were considered. Many of the possible alternatives were ruled out early in the plan formulation process due to various factors such as relatively high cost or adverse environmental impacts. Of the remaining alternatives considered, the most cost-effective alternative also had minimal adverse environmental impacts. The investigations conducted during the Feasibility Study indicated that the greatest net benefits over cost would be provided by a beach berm and dune system with revetments and two terminal groins along the Raritan Bayshore, with a system of levees and floodwalls provided along Chingarora and East Creeks and crossing Flat Creek. The selected plan consists of a levee and floodwall alignment for the Chingarora Creek element that begins at the high ground (+15 ft NGVD) near the intersections of Florence Avenue and Bank Street and ends at the northwestern end of the shorefront element. The shorefront element consists of a beach and dune incorporating terminal groins with adjoining revetments stretching from the Chingarora Creek levee/floodwall alignment to the southeastern limit of the dune that ties into the levee alignment near Flat Creek. The Flat / East Creeks element consists of a floodwall and levee alignment that begins at the southeastern limit of the Shorefront element and ties into the existing Keansburg levee at the eastern end of the project limits. The plan details levees and floodwalls featuring a peak elevation of +15 feet NGVD, with a beach fill featuring a minimum berm width of 50 feet at an elevation of +9 feet NGVD backed by a dune with a crest width of 50 feet at an elevation of +17 feet NGVD. In order to accommodate this design, the selected plan includes sector gates across Flat Creek and East Creek, three 6' x 6' sluice gates across the Chingarora Tributary and three 6' x 6' sluice gates across the East Creek Tributary, one local road closure gate, raising of the Rose Lane entrance to the International Foods and Flavors (I.F.F.) facility and the intersection of Jersey Avenue and Harris Avenue, and construction of an interior supplemental levee at East Creek

to reduce frequent flooding associated nuisance high tides as well as to reduce interior runoff flooding when the storm gates are closed. Also included is the raising of a portion of a restaurant, the extension of a stormwater outfall pipe encased in stone beneath the existing observation pier, and relocation of pedestrian dune walkovers and walkways. The shorefront element requires 688,000 cubic yards of initial fill to be placed from the Seabright borrow site including 18,000 cubic yards of advanced nourishment, and 21,000 cubic yards of fill trucked from documented upland sites every 9 years (5 renourishment cycles) thereafter for 50 years. The construction of the levees requires 81,600 cubic yards of fill.

The economic analysis of the alternative plans is based on January 2001 price levels and the Federal interest rate of 6-1/8 %. The economic analysis of the selected plan indicates that the proposed plan will provide annual benefits of $11,033,100 which, when compared to the total annual cost of the proposed plan of $ 7,073,000, yields a benefit to cost ratio of 1.6 with $3,960,100 in net excess benefits. The selected plan is the NED plan.

The first cost of the initial project construction including the advance nourishment is currently estimated to be $91,342,000. The Federal share of this first cost is $59,372,300 (65%), and the non-Federal share $31,969,700 (35%), with $27,581,700 being the total required non-Federal cash contribution and the balance is the estimated creditable cost for real estate and relocations. The annualized cost for scheduled periodic nourishment including monitoring and major rehabilitation is currently estimated to be $116,000, which will be cost shared at a rate of 50% Federal and 50% non-Federal.

The local sponsor, the NJDEP, has indicated their support for the selected plan and are willing to enter into a Project Cooperation Agreement with the Federal Government for the implementation of the plan. Local municipalities intend to cost share the non-Federal share with the State. These include Monmouth County and the Borough of Union Beach, which are supportive of the selected plan.